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Pre-Amend A
D. Smalls-Logan
3/19/03

Applicants : GULETSKY, et al.
Serial No. : To Be Assigned
Filing Date : Herewith
For : VOLUME HOLOGRAMS IN TRANSPARENT MATERIALS

February 20, 2002

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

PRELIMINARY AMENDMENT

SIR:

In advance of prosecution, please amend the above-identified patent application as follows:

IN THE CLAIMS:

Cancel pending claims 1-8 without prejudice, and add the following new claims:

9. A method of producing in a solid transparent material, a hologram of an object, comprising the steps of:

developing a three-dimensional mathematical model of an electro-magnetic field emanating from said object, said field producing an image of said object;

computing a corresponding three-dimensional set of points, light scattered from which reconstructs said field; and

focusing a pulsed laser beam into said solid transparent material onto each of said points sequentially, said beam being capable, when focused, of causing optical breakdown damage in said solid transparent material.

10. The method of claim 9, wherein said object is a real object.

11. The method of claim 9, wherein said object is a virtual object.

12. The method of claim 9, also including the step of arranging said set of points as a set of diffraction lattices.